Fallon, Valere, S. J. Eugenics. Translated by E. C. Messenger, Ph.D. (London, Burns, Oates and Washburne, 1923. pp. 62.)

This little book is a welcome sign of the times. We have sometimes feared that the opposition of the Roman Catholic Church to the study of Eugenics was a permanent factor in our problem, with which we had to reckon. But here is a temperate and reasonable account of the objects and methods of the science, written and published with the usual authorisation by a Jesuit professor at the Catholic University of Louvain.

The Roman Catholic Church has of course no interest in obstructing the mental and physical improvement of the human race. to some extent prejudiced against new ethical requirements which are not stamped by its own mind; but these prejudices may be surmounted. It has always forbidden the 'mutilation' of any human being, and is therefore compelled to condemn American Laws of sterilisation. cannot reconcile this prohibition with the inclusion of "castrati" in the Pope's choir; there were still two of these unfortunates at St. Peter's the first time I went to Rome, less than forty years ago.) Still more important are the objections made by the Church to any form of birth-control, except by abstinence. Even the open-minded writer of this essay fails to recognize that a new problem has been created by the notable increase, during the last half century, in the average duration of human life; and he does not see that the period of abstinence which he recommends would have very little effect on the birth-But it is satisfactory that he admits certain cases of heritable taint, in which marriage ought not to be permitted.

Professor Vallon mentions, without sympathy, the hysterical denunciations of Eugenics by Messrs. Belloc and Chesterton. We may wonder why these popular writers and journalists should wish to fill England with degenerates. But they have a reason for their incoherent rage. They realise that Science, instead of confining itself to making bad smells in laboratories, is calmly preparing to lead a social and moral revolution, a revolution in which neither medieval casuistry nor Marxian class-war will count for anything at all. The great struggle of the future will be between Science and its enemies. I can see no reason why the Christian religion should be on the side of the powers of darkness.

Wr R. INGE.

Ogburn, William Fielding, Professor of Sociology at Columbia University. Social Change with respect to Culture and Original Nature. B. W. Huebsch, New York, 1923. Inc. \$2.00.

THERE appears to be a tendency on the part of writers on social science to conduct their expositions on a plane of rather extreme generality; and the result is that the indefiniteness of terms and exposition spreads to the conclusions. The present work treats, as its title indicates, of Social change with respect to Culture and Original Nature; but both these terms are left with their exact connotations undetermined. Of the Original Nature of Man the reader is told that the term is used "as relating to man's psychological equipment" and for further details

he is referred to the text-books on psychology. "However, in general the contribution of heredity to human nature is an organization of mechanisms that respond to stimuli in part or as a whole along specific channels. The conception of original nature is therefore that of a responding mechanism, living matter which has properties of activity as truly as gunpowder has the property of exploding or hydrogen and oxygen have the property of uniting."

The other term, culture, is defined in the words of E. B. Tylor as "that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as

a member of Society."

The terms being thus defined, Professor Ogburn proceeds to demonstrate certain contrasting qualities in them and to develop the consequences of such contrasts. Whereas the original nature of man is characterized by stability and permanence, culture has a marked tendency to change. There appears to be no evidence of any biological change in man since the last glacial epoch; but since that period, culture has been in a state of rapid change and the rapidity of the change has tended continuously to increase. In the earlier stages when the cultural changes were relatively slow, there was time for man to become adapted to the new conditions; but with the increasing acceleration of cultural change, the adaptations have failed to overtake the changes. Before man has become fully adapted to a given cultural state, that state has already given place to one more advanced. There is thus established a constant "cultural lag." The existing adaptations are not to existing cultural conditions but to those that The result is a constant maladjustment between the preceded them. relatively stable man and the unstable culture; and this maladjustment tends to increase with the increasing rapidity of cultural change.

With Professor Ogburn's conclusions few sociologists will dis-The maladjustment of man to his "induced environment" has already been pointed out by several observers. What is now needed is for thinkers to come down from the general to the particular; to enquire what are the factors of human nature and modern culture respectively that occasion such maladjustment. Professor Ogburn expressly disclaims any such intention. "No detailed study is to be made here, however. Our purpose is rather to chart the problem and draw such conclusions as the general analyses and present status seem to warrant." But the problem has already been charted. necessary now is to seek the solution. And even this has been tentatively approached. It has, for instance, been suggested that one of the prime causes of the maladjustment is the fundamental discrepancy between the physiological constitution of man and the properties of those mechanisms with which he is becoming more and more associated. The former is subject to a rigid speed limit imposed by the maximum velocity of a nerve impulse. The latter has virtually no speed limit. The actions of man are normally characterized by endless variety: the movements of machines by unvarying repetition. intimate association of men and machines therefore involves unavoidable maladjustment.

Again, it has been pointed out that the appearance in modern

societies of vast and rapidly-increasing numbers of persons of grossly inferior intelligence constitutes a serious maladjustment of man to his present environment. The causes of this sinister phenomenon have been carefully investigated and are sufficiently well understood to bring them within the sphere of remedial action. The rise and growth of a "moron" population is surely a matter that merits attention from sociologists.

In his treatment of Eugenics Professor Ogburn is not very satisfactory. It is clear that he does not take the subject quite seriously, and he even shows a little obscurity as to the goal of Eugenic endeavour. Thus (p. 338) he observes that "The programme of eugenics is a programme which attempts to achieve desirable changes in biological man"; and on the following page: "Careful readers of biology, therefore, realize that any idea of changing the biological nature of man is a very ambitious one," "at present the knowledge necessary for the control desired in eugenics is meagre"; and he concludes: "Practically, therefore, a rapid, controlled change in the inherited biological nature of man seems almost impossible for the present."

Thus, the purpose of Eugenics seems to be conceived as the production of radical changes in the nature of man; with the evolution of a super-man. If some such idea may have existed in the minds of the enthusiastic pioneers of the past, it has little connection with modern Eugenics; which contents itself with the modest progamme—easily capable of realization—of maintaining the normal standard of human quality which has been reached by natural selection and of securing the race against the progressive degeneration which threatens civilized man as the result of the dysgenic, and purely artificial, selection occasioned by the differential birth-rate.

R. AUSTIN FREEMAN.

Gates, R. Ruggles, Ph.D., F.L.S., Professor of Botany in the University of London. *Heredity and Eugenics*. London, Constable & Co., 1923, pp. 8+278, with 35 illustrations.

A Book on abnormalities of human structure and their inheritance written by a botanist is certainly a rare object. Professor Gates is, of course, well-known for his studies on the cytological basis of inheritance, but none of his previous publications have had any reference to animals, to say nothing of man, nor have any of his researches touched the animal side of biology. It is therefore rather a daring stroke on his part to become the author of a book dealing with human characters, and one which invites criticism in advance. Nevertheless we must admit that Professor Gates stands the test well. His book commencing with the usual stereotyped exposition of the Mendelian Theory of heredity and its chromosomal basis proceeds to give a most valuable compilation of all the known abnormalities of human structure and to record what is known of their inheritance. range from colour blindness and polydactyly to such small deviations from type as left-handedness. This section of the book will render it a valuable addition to the libraries of all who are interested in human heredity. In dealing with the inheritance of mental qualities—infinitely the most important division of the subject—Professor